ABSTRACT OF THE DISCLOSURE

A petroleum coke-based combined De-SOx and De-NOx process is described comprising use of four key units, namely, a flue gas concentrator (FC), a carbothermal reducer (CR), an elemental sulphur condenser (SC) and an oxidizer for reduced sulphur and nitrogen species (RO). The two major reactants in this process are the petroleum coke, preferably, and a flue gas containing SOx/NOx. The major products are elemental sulphur from the SC and activated coke from the CR. The process provides for SOx and NOx abatement in an economically viable way while the activated coke produced has a wide range of applications, particularly, in environmental protection.